DOCUMENT RESUME

ED 146 657 HE 009 423

AUTHOR Rogers, George W., Jr.
TITLE First Semester College Performance of G.E.D. Testees.
PUB DATE [77]
NOTE 10p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Academic Achievement; Admission Criteria; College Admission; *College Freshmen; *College Students; Comparative Analysis; Counseling; Grade Point Average; Higher Education; *High School Equivalency Programs; *High School Graduates; Statistical Studies
IDENTIFIERS General Educational Development Tests

ABSTRACT

The first semester college performances of 170 students who had received a G.E.D. high school certificate were examined. In addition, the usefulness of the G.E.D. for predicting college success during the first semester of enrollment was evaluated. A stepwise multiple regression procedure revealed that G.E.D. scores were not useful in predicting academic success. The mean grade-point average for G.E.D. recipients was 1.71 as compared with 2.11 for those students who had completed high school. Nearly 60 percent of those with G.E.D.'s performed at or below the D grade level (1.99 or less). Implications for college counselors and admissions officers are discussed. (Author/MSE)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED146857

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

George Rogers

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

HE

First Semester College Performances of G.E.D. Testees

George W. Rogers, Jr.

Director of Testing and Psychological Services

Northern Kentucky University .

HE009423

The first semester college performances of 170 students who had received a G.E.D. High School Certificate were explored. In addition, the usefulness of the G.E.D. for predicting college success during the first semester enrolled was also evaluated. A Stepwise Multiple Regression found that G.E.D. scores were not useful in predicting academic success. The mean G.P.A. for G.E.D. recipients was 1.71 as compared with 2.11 for those students who had completed high school. Nearly 60 percent of those with G.E.D.'s performed at or below the "D" level(1.99 or less). Implications for college counselors and admissions officers are discussed.

First Semester College Performances

of G.E.D. Testees

The General Educational Development (G.E.D.) Testing Program was established in 1942 to provide persons with the opportunity of earning a high school equivalency diploma, making it possible for them to qualify for certain jobs, to gain promotions, and to pursue higher educational or other personal goals.[1] Most colleges and universities in this country accept the G.E.D. High School Eqivalency Certificate for admission purposes in lieu of the standard four-year high school education. This would seem to be a reasonable procedure in that the G.E.D. tests purport to measure as directly as possible the attainment of the major objectives of the secondary school program of general education.[2] Further, successful G.E.D. testees would also have demonstrated characteristics which are welcomed in college-bound students. The Examiner's Manual for the Tests of General Educational Development indicates that the tests emphasize intellectual power; competence in using major generalizations, concepts, and ideas; and the ability to comprehend exactly, evaluate critically, and to think clearly.[3]

---

1. G.E.D. Brochure of Information for Candidates (Washington, D.C.: American Council on Education, 1976), p. 4.

2. Examiner's Manual for the Tests of General Educational Development (Washington, D.C.: American Council on Education, 1971), p. 6.

3. Ibid., p. 6.

One situation which deludes these ideal qualities as measured by the G.E.D. tests is the fact that almost every state grants high school equivalency certificates based upon a standard score average of 45 across the five subtests (English; Social Studies; Science; Literature; and Mathematics).[4] This would place the overall level of functioning on these tests at about the thirty-first percentile.[5] One might speculate that students obtaining the minimum passing standard score average would not fare as well at the college level as G.E.D. testees obtaining standard score averages in the 50's, 60's, or even 70's. This question was investigated along with a general investigation of the first semester college performances of G.E.D. High School Equivalency Certificate recipients.

Method

The research for this study first involved an identification of all G.E.D. testees who had ever been enrolled at a small, mid-western college. This multi-purpose, urban, commuter insitution was founded in the late 1960's and had an enrollment of about 6,000 students. Over 200 G.E.D. recipients were identified, but only 170 had actually completed a full semester of work at this institution, here defined as 12 to 18 semester hours of college work. Of this number, 126 students had presented to the admissions office transcripts of their official G.E.D. test scores in addition to their High School Equivalency Certificates. The predictive quality of the individual

---

4. The G.E.D. Testing Program: Policies and Centers (Washington, D.C.: American Council on Education, 1976).

5. Examiner's Manual for the Tests of General Educational Development, op. cit., p. 16.

G.E.D. test scores and averages for these 126 freshmen was analyzed by means of a stepwise multiple regression.[6] The independent variables of G.E.D. 1) English scores, 2) Social Studies scores, 3) Science scores, 4) Literature scores, 5) Math scores, 6) G.E.D. averages plus 7) their ages upon entrance into college were analyzed to determine if a reliable subset of predictor variables could be isolated which would predict first semester grade point averages.

The stepwise multiple regression program isolates first the independent variable that explains the greatest amount of variance in the dependent variable. Next the variable that explains the greatest amount of variance in conjunction with the first is then isolated, and so on. The parameters section of the program had a statistical criterion of F = .05.

In addition, sample characteristics of the 170 students were determined and comared with the characteristics and first semester performances of 858 full-time and first-time freshmen who had officially graduated from high school.

Results

The mean age of the 170 G.E.D. recipients was 30.11 years with a range of 17 to 60 years. This was undoubtedly a rather mature group agewise as compared to the typical 18 year old college freshman. The mean G.E.D. standard score average for the 126 member subgroup was 50.2 with a range of 45.0 to 63.4. An evaluation of the first semester grade point averages (G.P.A.s) of the 858 full-time

---

6. Norman H. Nie, C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent, Statistical Package for the Social Sciences, 2nd ed. (New York: McGraw-Hill, Inc., 1975).

students revealed that their mean G.P.A. was 2.11 (on a 4-point scale). Of this group, 38 percent functioned at or below the 1.99 grade level ("D or F" performances). In comparison, the G.E.D. group obtained a first semester average of 1.71 with 59 percent of their number functioning at or below the 1.99 level. Only 81 of the 170 G.E.D. students had earned 2 or more semesters of college work, and their mean overall grade point average was 1.96.

Next, the stepwise multiple regression was run and the findings are outlined in Table 1. G.E.D. Science scores explained the

---

Insert Table 1 about here

---

greatest amount of variance in the dependent variable "first semester G.P.A.s." However, all seven variables combined can only account for about one third of the variance in G.P.A., $R^2=.36$. This operation yielded the unwieldy prediction equation presented below

1st Semester G.P.A. = .05(G.E.D. Science score) + .04(English score) - .06(Language score) + .02(Age of the person entering college) + .03(Social Studies score) + .02(G.E.D. Average) + .01(Math score) - the constant, 3.25.

The standard error of estimate for this equation would be ± 1.01. Perusing the last column of Table 1, one can observe that some individual variables correlate relatively high with G.P.A.: Science scores, Social Studies scores, and English scores. However, these individuals correlations are not high enough to enable one to easily predict future G.P.A.s.

Table 1

Summary Table

Variable	Multiple R	R^2	Correlation of each variable with G.P..
G.E.D. Science scores	.48	.23	.48
G.E.D. English scores	.53	.28	.40
G.E.D. Literature scores	.56	.32	.13
Age	.58	.34	.16
G.E.D. Social Studies scores	.60	.36	.47
G.E.D. Averages	.60	.36	.33
G.E.D. Math scores	.60	.36	.33

Discussion

The sample of students used in this study obviously did not perform very well during their first semester of college, a most important semester for many students. Important in that students' ideas and expectations concerning college and their abilities can be modified or shaped by these initial experiences. The G.E.D. freshmen's grades on the average were much poorer than the typical freshmen who had graduated from high school. The consensus fostered by these results might be that G.E.D. recipients can be expected to experience academic difficulties during their first semester of college regardless of their age or G.E.D. average. G.E.D. test scores or averages cannot be used to readily predict academic success and just being an older adult does not necessarily promote academic maturity.

In essence, a G.E.D. Certificate and four years of high school training are not equivalent regarding preparation for initial collegiate experiences. Of course, this isolated study may not generalize everywhere, and individual institutions must conduct similar research on their own. But one must consider the idea that G.E.D. recipients who wish to become college freshmen cannot equate a 10-hour exam and four years of formal schooling. G.E.D. persons must be made aware of the fact that college is tough and that their chances of success are diminished because they did not experience both the tangibles and intangibles of a high school education. Because they were not available, this study did not measure a number of factors which need to be carefully investigated. Such factors as motivation; intellectual

level; basic skills in reading, writing and mathematics; last grade attended in school; self-concept; ability to deal with frustration; basic study skills; and ability to manage time must also be investigated and considered by admissions counselors. In fact, these factors may be even more important than the G.E.D. scores. Past research tends to support the idea that freshman year academic accomplishments generally reflect past grade getting behavior in high school.[7] But in the cases of G.E.D. students, G.E.D. scores and averages plus more specific personal data regarding personality and intellectual traits should be weighed in order to effectively counsel and aid the entering G.E.D. recipient.

---

7. Carl A. Lindsay and Richard Althouse, "Comparative Validities of the Strong Vocational Interest Academic Achievement Scale and the College Student Questionnaire Motivation for Grades Scale," Educational and Psychological Measurement, Summer 1969, pp. 489-493.